Antimicrobial Lexitropsins Containing Amide, Amidine, and Alkene Linking Groups

Titre	Antimicrobial Lexitropsins Containing Amide, Amidine, and Alkene Linking Groups
Type de publication	Article de revue
Auteur	Anthony, Nahoum G [1], Breen, David [2], Clarke, Joanna [3], Donoghue, Gavin [4], Drummond, Allan J [5], Ellis, Elizabeth M [6], Gemmell, Curtis G [7], Helesbeux, Jean-Jacques [8], Hunter, Iain S [9], Khalaf, Abedawn I [10], Mackay, Simon P [11], Parkinson, John A [12], Suckling, Colin J [13], Waigh, Roger D [14]
Pays	Etats-Unis
Editeur	American Chemical Society
Type	Article scientifique dans une revue à comité de lecture
Année	2007
Langue	Anglais
Date	Jan-11-2007
Numéro	24
Pagination	6116-6125
Volume	50
Titre de la revue	Journal of Medicinal Chemistry
ISSN	0022-2623
Résumé en anglais	The synthesis and properties of 80 short minor groove binders related to distamycin and the thiazotropsins are described. The design of the compounds was principally predicated upon increased affinity arising from hydrophobic interactions between minor groove binders and DNA. The introduction of hydrophobic aromatic head groups, including quinolyl and benzoyl derivatives, and of alkenes as linkers led to several strongly active antibacterial compounds with MIC for *Staphylococcus aureus*, both methicillin-sensitive and -resistant strains, in the range of 0.1−5 μg mL-1, which is comparable to many established antibacterial agents. Antifungal activity was also found in the range of 20−50 μg mL-1 MIC against *Aspergillus niger* and *Candida albicans*, again comparable with established antifungal drugs. A quinoline derivative was found to protect mice against *S. aureus* infection for a period of up to six days after a single intraperitoneal dose of 40 mg kg-1.
URL de la notice	http://okina.univ-angers.fr/publications/ua11624 [15]
DOI	10.1021/jm070831g [16]
Titre abrégé	J. Med. Chem.

Liens

[1] http://okina.univ-angers.fr/publications?f[author]=20548
[2] http://okina.univ-angers.fr/publications?f[author]=20549
[3] http://okina.univ-angers.fr/publications?f[author]=20550

[4] http://okina.univ-angers.fr/publications?f[author]=20551
[5] http://okina.univ-angers.fr/publications?f[author]=20552
[6] http://okina.univ-angers.fr/publications?f[author]=20553
[7] http://okina.univ-angers.fr/publications?f[author]=20554
[8] http://okina.univ-angers.fr/jeanjacques.helesbeux/publications
[9] http://okina.univ-angers.fr/publications?f[author]=20555
[10] http://okina.univ-angers.fr/publications?f[author]=20556
[11] http://okina.univ-angers.fr/publications?f[author]=20557
[12] http://okina.univ-angers.fr/publications?f[author]=20558
[13] http://okina.univ-angers.fr/publications?f[author]=20559
[14] http://okina.univ-angers.fr/publications?f[author]=20560
[15] http://okina.univ-angers.fr/publications/ua11624
[16] http://dx.doi.org/10.1021/jm070831g